

ABSTRACT

A piezoelectric vibrator with a smaller diameter may have a higher sound pressure to obtain a piezoelectric vibration apparatus with a smaller diameter and a thinner thickness. Although the primary electrode is uniformly coated on the primary side, it is not coated on all the primary side of the piezoelectric film and it is made of a continuous mesh metal film. Accordingly, a driving voltage may be applied on the piezoelectric film while there are some portions on the primary side on which the metal film is partially uncoated so that the curvature restraint of the piezoelectric film due to the primary electrode may be reduced. The contact electrode with a higher metal film occupation ratio than that of the primary electrode is coated so that the contact electrode may be used as a soldering portion for connecting thereto the terminal.